

2.15 Transportation and Traffic

<i>Issues (and Supporting Information Sources):</i>		<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
15.	TRANSPORTATION / TRAFFIC— Would the project:				
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e)	Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f)	Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Transmission line installation activities would temporarily disrupt transportation and circulation patterns along the project corridor. This Initial Study determined that the Proposed Project would significantly affect roadway segments and intersections on transmission line segments if the construction zone were to reduce the number of travel lanes during peak traffic periods. Potential conflicts along the project corridor could occur between construction traffic and alternative modes of transportation. Temporary effects on the potential for traffic accidents, emergency access, and disruptions to transit service could also occur. A temporary change in air traffic patterns due to helicopter use during construction would also occur. All transportation impacts would be less than significant with implementation of Mitigation Measures 2.15-1a through 2.15-1g and 2.15-2.

In addition, the transportation and traffic impacts that could result from implementation of Mitigation Measure 2.1-1 are addressed in this section.

2.15.1 Setting

Sonoma County is considered a rural, low-density region. Major trip attractors are dispersed throughout the County and therefore, the dominant mode of transportation is the private automobile (SCTA, 2001). The roadway network that would be affected by the project is located

in southeastern Sonoma County, in and immediately southwest of the City of Sonoma. The transportation system in the project region is composed of an interconnected network of federal, state, county, and city roadways, local transit systems, bicycle facilities, and rail right-of-ways. Major project area roadways are described below.

Roadway Network

Regional access to the project corridor is provided by Interstate 80 (I-80) and U.S. Highway 101 (U.S. 101). I-80 is approximately 25 miles southeast of the project and serves as a major route connecting the southern Sonoma region with the San Francisco Bay Area and the Central Valley. U.S. 101 is approximately 10 miles west and serves as a major route connecting the Sonoma region to the San Francisco Bay Area and the North Coast.

Regional access is also provided by two state highways, namely State Route 12 and State Route 116, each of which would be used to transport construction materials, equipment, and workers to and throughout the project corridor. The project corridor and surrounding roadway network is illustrated in **Figure 1-3**.

State Route 12 (SR 12) is a two-lane highway that passes along the eastern edge of the project area. SR 12 widens to include turning lanes in both directions at its intersection with Watmaugh Road, and widens to four lanes plus turning lanes in both directions at its intersection with Leveroni Road. The current travel pattern within the City of Sonoma is dominated by SR 12, which passes through downtown Sonoma and includes portions of Broadway, West Napa Street, and the Sonoma Highway. Traffic volumes are highest along SR 12 at West Napa Street (from Broadway to the Sonoma Highway), though traffic volumes on SR 12 are generally high along the project corridor as well. At Leveroni Road, southbound SR 12 has an annual average daily traffic (ADT) total of 15,400 vehicles per day (vpd) and a peak month ADT of 16,600 vpd, and northbound SR 12 has an annual ADT of 10,700 vpd and a peak month ADT of 11,700 vpd (Caltrans, 2004).¹

State Route 116 (SR 116) is a two-lane highway that traverses the southern border of the project area and provides access to the area from areas south of Sonoma and areas southeast of the project site. At Arnold Drive, westbound SR 116 has an annual ADT of 15,400 vpd and a peak month ADT of 17,000 vpd, and eastbound SR 116 has an annual ADT of 17,800 vpd and a peak month ADT of 18,900 vpd (Caltrans, 2004).

The local and county roadways that border, cross, or may be used to access the proposed transmission route are described below. Some would be affected by a single transverse crossing, generally between intersections, while others would be used for access throughout project construction.

¹ The peak-month daily traffic volume represents average conditions for the month of heaviest traffic flow; the Caltrans publication does not identify the specific month in which these higher traffic volumes occur. Likewise, Caltrans does not identify the specific hour in which the “peak hour” traffic volumes occur, but typically the peak-hour traffic volume occurs during the afternoon commute period.

Adobe Road is a two-lane roadway with shoulders. There are turning and acceleration lanes at the intersections. It receives high commuter traffic during the a.m. and p.m. peak hours.

Arnold Drive is a two-lane roadway with shoulders. There are turning and acceleration lanes at the intersections. It receives high commuter traffic during the a.m. and p.m. peak hours.

Felder Road is a two-lane roadway with discontinuous narrow shoulders. Within the project corridor, there is vertical and horizontal curvature in the road and trees along the roadway corridor.

Frates Road is a two-lane roadway with shoulders. There are turning and acceleration lanes at the intersections. It receives high commuter traffic during the a.m. and p.m. peak hours.

Leveroni Road is a two-lane roadway with discontinuous narrow shoulders. There are turning and acceleration lanes at major intersections and trees line the road.

Napa Road is a two-lane roadway with shoulders. There are turning and acceleration lanes at its intersection with SR 12. Napa Road becomes Leveroni Road in the project area.

Public Transit

Sonoma County Transit and Golden Gate Transit provide fixed-route service within Sonoma County. The project area is served by several Sonoma County Transit bus routes which provide service throughout the City of Sonoma, and between the City of Sonoma and the surrounding cities (SCTA, 2001).

In addition to fixed-route transit services, four paratransit services operate within Sonoma County. Three of the paratransit services (Sonoma County Paratransit, Petaluma People Services, and Whistlestop Wheels) provide service in the project area. Paratransit services operate on demand and provide curb-to-curb transportation for individuals with disabilities (SCTA, 2001).

Bicycle and Pedestrian Transportation

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement legends, and signs. Bike routes are roadways that are designated for bicycle use with signs, but no separate lane width. Within the vicinity of the project site, there are bike lanes on Arnold Drive north of the project corridor (SCTA, 2001).

The Countywide Bicycle Advisory Committee (CBAC) and Sonoma Bicycle Advisory Committee (SBAC) support bicycle- and pedestrian-related development in the project area and surrounding vicinity. The Sonoma County Transit Authority's (SCTA) *Comprehensive Transportation Plan* indicates that bike lanes are planned on Arnold Drive (from Country Club Drive to Petaluma Avenue) and on Leveroni Road (from Arnold Drive to Highway 12) (SCTA, 2004).

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. The project corridor currently contains pedestrian facilities within the City of Sonoma on Leveroni Road between Fifth Street West and Broadway.

2.15.2 Regulatory Context

The development and regulation of the project area transportation network primarily involves state and local jurisdictions. All roads within the project area are under the jurisdiction of state and local agencies. State jurisdiction includes permitting and regulation of the use of state roads, while local jurisdiction includes implementation of state permitting, policies, and regulations, as well as management and regulation of local roads. Project construction work would require encroachment permits prior to construction from all jurisdictions that manage or maintain roadways. Applicable state and local laws and regulations related to traffic and transportation issues are discussed below.

California Department of Transportation

The California Department of Transportation (Caltrans) manages interregional transportation, including management and construction of the California highway system. In addition, Caltrans is responsible for permitting and regulation of the use of state roadways. The project area includes two roadways that fall under Caltrans' jurisdiction (i.e., SR 12 and SR 116).

Caltrans' construction practices require temporary traffic control planning "during any time the normal function of a roadway is suspended" (FHA, 2003). In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance. Caltrans regulations would apply to project construction that would include installation of transmission poles immediately adjacent to roadways, as well as the transportation of construction crews and transmission equipment throughout the project area.

Sonoma County

Several of the roads that parallel or cross the transmission route are under the jurisdiction of Sonoma County. County policies and regulations regarding the design, use, or obstruction of roadways are detailed in the Sonoma County General Plan Circulation and Transit Element (Sonoma County PRMD, 1989). The majority of these goals and policy guidelines in the Circulation and Transit Element pertain to the development and planning of roadways and transit systems and therefore are not relevant to the Proposed Project.

The *2001 Countywide Transportation Plan* for Sonoma County provides further guidance for transportation planning and associated goals and policies (SCTA, 2001). This plan is currently being updated and is available in draft form. This plan, again, focuses on the design and implementation of improvements to the county circulation system, including roadways, bikeways, and rail service. The plan does not include policies relevant to the Proposed Project.

City of Sonoma

The City of Sonoma General Plan Circulation Element promotes alternative modes of transportation, roadway improvements, and traffic improvements throughout the planning area (City of Sonoma, 1995). As the plan focuses on the design and implementation of circulation system improvements, policies in this element do not directly relate to the Proposed Project.

In addition, Chapter 10.08 of the City of Sonoma Municipal Code details the City's regulations regarding the use of roads and the construction of utilities infrastructure, including encroachments. Numerous regulations are applicable to the proposed construction, including regulations regarding the use of roadways, the type of vehicles and load sizes allowable on given roadways, encroachment on private property, and the construction of utilities infrastructure (City of Sonoma, 2002). The municipal code applies to all roads within the City's jurisdiction, and project construction must adhere to all ministerial regulations presented in the Municipal Code.

California Joint Utility Traffic Control Committee

PG&E is a member of the California Joint Utility Traffic Control Committee, which in 1996 published the Work Area Protection and Traffic Control Manual (CJUTCC, 1996). The traffic control plans and associated text depicted in this manual conform to the guidelines established by the federal manual regarding basic standards for the safe movement of traffic upon highways and streets in accordance with Section 21400 of the California Vehicle Code (DMV, 2005). These recommendations include provisions for safe access of police, fire, and other rescue vehicles. In addition, the document requires a utility to apply for an Excavation Permit and a Special Traffic Permit from the applicable jurisdiction, as well as submit a Traffic Management Plan subject to agency review and approval.

2.15.3 Transportation and Traffic Impacts and Mitigation Measures

According to the CEQA *Guidelines*, a project would normally result in an impact to transportation and traffic if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Occasional post-construction maintenance activities would briefly affect only local segments. Therefore, these impacts would be less than significant.

The duration of potentially significant impacts, related to short-term disruption of traffic flow and increased congestion generated by construction vehicles and/or loss of a travel lane to accommodate the construction work zone, would be limited to the period of time needed to complete construction of the project components. Therefore, mitigation measures identified below focus on reducing the short-term project construction effects; long-term mitigation measures are not needed.

This analysis relies upon available information and field reconnaissance of roadway characteristics (e.g., pavement widths and existence of on-street parking). Impacts to traffic and circulation that would result from increases in traffic volumes, loss of travel lanes and/or parking

areas, and potential safety effects associated with construction were evaluated. Construction characteristics, including proposed manpower and equipment, location of construction, and rate of construction were used to conservatively determine the potential number of vehicles that could be required for the proposed project.

- a) **Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections): *less than significant impact with incorporated mitigation. See discussion under b).***
- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways: *less than significant impact with incorporated mitigation.***

The Proposed Project would not introduce any new uses to the project corridor that would generate long-term changes in traffic. Thus potential traffic and transportation effects would be confined to construction of the transmission line.

Traffic-generating construction activities related to construction or modification of the new tubular steel and wood poles, the installation of the new transmission line, and the upgrade of the Lakeville and Sonoma Substations, would consist of the daily arrival and departure of construction workers, trucks hauling equipment and materials to the construction site, and the hauling of excavated soils from, and importing of new fill to, each pole site. Approximately half of the poles would be located adjacent to Frates Road, Adobe Road, Felder Road and Leveroni Road. An estimated average of 38 workers per day would be used for the construction crew; however, up to 71 employees may be used during peak construction periods. Construction equipment used for the Proposed Project would include concrete trucks, and periodic delivery of poles, conductor spools, hardware and equipment, and a helicopter. Construction would include the transportation of oversize loads, such as pole trucks.

The proposed alignment would follow within and/or across several roadway rights-of-way. The placement of the transmission line on poles adjacent to the roadway would temporarily disrupt existing transportation and circulation patterns in the vicinity. Impacts would include direct disruption of traffic flows and street operations. Lane blockages during installation would result in a reduction in travel lanes. Installation work within and/or across high traffic volume regional arterials would notably affect traffic flow and operations at these locations.

Prior to transmission line construction, two staging areas would be prepared for materials delivery, storage, and preparation prior to construction. One staging area would be located off Adobe Road near the Lakeville substation, and the other would be near the Sonoma substation. The sites would also be used as helicopter landing areas. The

construction of the staging area would increase construction worker and truck trips along regional arterials near the staging areas.

Helicopter traffic to and from the staging areas may cause temporary distractions for drivers. Some of the helicopter landing areas are near roads (e.g., Adobe and Leveroni Roads), and traffic would be stopped when a loaded helicopter is within a specified distance of a roadway, which would cause traffic disruptions. To minimize impacts to less than significant, helicopter work would be performed according to the FAA Lift Plan (see Mitigation Measure 2.15-2).

Installation of transmission lines (conductors) would include installation of new conductors. Prior to stringing conductors, temporary clearance structures would be installed at 11 road crossings and other locations where the new conductors could accidentally come into contact with electrical or communication facilities, other transmission lines, and/or vehicular traffic during installation. The temporary clearance structures consist of a wood pole with a frame at the top that resembles a “Y” placed on each side of the road or transmission line being crossed; installation and removal of clearance structures is similar to that of wood poles, although less excavation is required and no foundation is required. The clearance structures would prevent the conductor from being lowered or falling into traffic or onto another transmission line.

Pole line construction includes several elements that have different crew requirements. The pole line crew is made up of the wood pole replacement crew, conductor installation crew, tubular steel pole foundation work crew, tubular steel pole crew, and the installation work crew. The wood pole replacement crew is estimated to consist of six members who would frame and prepare the site (generally working Monday through Thursday), and an additional three crews (roughly 24 people) would be needed for one day to replace four poles following site preparation (typically a Friday). The wood pole replacement is expected to take four weeks.

The conductor installation would require a line crew of about 16 people over a six-month period. A helicopter crew (three people) would be required to install the new circuit wire (approximately ten days).

A crew of six would establish the tubular steel pole foundation and would perform the work in two days. For more difficult foundations, due to accessibility issues, an additional crew of six and a two-person helicopter crew would be used. The foundation would take place over a five to six-month period. The installation of the tubular steel poles would require a six member tower crew and a three member contract crane crew over a two week period. The transferring and setting of the wires would require a crew of 15 to 20 people.

Based on the estimated average crew sizes and the staggering of the work schedule, construction worker trips traveling to and from the work site are not anticipated to exceed an average of 48 round trips (96 one-way trips) per day. However, construction crew trips

would reach an estimated 90 round trips (180 one-way trips) per day during peak construction periods.² Accounting for the delivery of construction components (which would be shipped on demand to the project site and the staging areas throughout the construction period) the peak number of off-site construction truck trips would be approximately 10 round trips (20 one-way trips) per work day.

If the construction zone were to reduce the number of travel lanes during peak traffic periods, the Proposed Project would significantly affect roadway segments and intersections on all segments adjacent to or in the roadway by causing either roadway or intersection levels of service to be unacceptable. The decrease in traffic volumes outside the peak periods typically, but not universally, is sufficient to allow the reduced number of travel lanes to accommodate the traffic flow without significant delays. Delays also would be experienced by drivers during off-peak hours, but because of the lower volume, fewer people would be affected by the delays during those periods.

Construction as planned would occur over a period of approximately 19 months during which temporary lane closures (for varying durations at different locations) would occur along the project corridor. Project construction would include temporary closure of one lane of traffic on Adobe Road, Leveroni Road, and Frates Road (Frates Road may be wide enough to place cones to create a three-lane pattern with the north shoulder and westbound lane closed). Lane closures would occur when poles along Frates Road and Adobe Road are being “topped” (tops cut off and only distribution lines remain). Installation of new poles along Leveroni Road would also require the temporary closure of one lane of traffic.

Substation modifications at Lakeville and Sonoma Substations would generate both construction worker and truck delivery trips. The estimated average crew size of nine at each substation is not anticipated to exceed 14 round trips (28 one-way trips) from construction workers traveling to and from each work site on an average day. Accounting for the delivery of construction components (which would be shipped on demand to the project site throughout the construction period), the total number of off-site construction truck trips would be approximately 10 round trips (20 one-way trips) per work day.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service on any project roadways. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles.

Proposed hours of construction are Monday through Friday, 7:00 a.m. to 5:00 p.m. for most segments adjacent to or in the road right-of-way. Most project-related hauling and deliveries would be dispersed throughout the day, thus lessening the effect on peak-hour traffic. Project truck traffic occurring weekdays during the hours of 7:00 to 9:00 a.m. and

² It should be noted that not all of these trips would be traveling to/from the same construction site because the Proposed Project is made up of several construction elements.

4:00 to 6:00 p.m. would coincide with peak-period traffic, and therefore, would have the greatest potential to impede traffic flow. However, the deliveries would be requested between the hours of 9:00 a.m. and 3:00 p.m. when the contractor would be ready to receive them.

As discussed above, project construction activities could generate up to 90 off-site construction worker vehicle round trips (180 one-way trips) and 10 off-site truck round trips (20 one-way trips) per day. Because not all construction-related trips would be assigned to the same construction location (i.e., crews would be assigned to different substations and pole alignment sections) and because the construction schedule is staggered, these project-generated trips would not be substantial relative to existing volumes on roadways in the affected areas, and would fall within the daily fluctuations of traffic volumes for these roadways. Therefore, this short-term increase in vehicle trips would not significantly affect level of service and traffic flow on roadways.

Once constructed, the transmission line and substations would require routine maintenance trips, inspection, and vegetation management activities. Vegetation management in the right-of-way could include control of noxious weeds and trimming of shrubs or trees for safety upkeep and would be limited to seasonal and yearly traffic. Maintenance activities would not increase above existing levels that are employed to maintain the existing transmission line and therefore, would not result in an increase in traffic in the project area.

As specified under Mitigation Measure 2.15-1a, PG&E shall obtain all necessary local road encroachment permits prior to construction and would comply with all the applicable conditions of approval. In addition, Mitigation Measure 2.15-1b requires the contractor to prepare a traffic management plan in accordance with professional engineering standards prior to construction. Specific requirements that may be included in the traffic management plan are identified under Mitigation Measures 2.15-1b through 2.15-1g. Implementation of Mitigation Measures 2.15-1a through 2.15-1g would ensure that potential impacts associated with temporary lane closures, and increases in construction traffic, would be less than significant.

Impact 2.15-1: Project construction activities could adversely affect traffic and transportation conditions in the project area. This would be a less than significant impact with implementation of Mitigation Measures 2.15-1a through 2.15-g.

Mitigation Measure 2.15-1a: PG&E shall obtain and comply with local road encroachment permits for roads that are affected by construction activities (i.e., Frates Road, Felder Road, and Leveroni Road).

The California Joint Utility Traffic Control Committee (of which PG&E is a member) published the Work Area Protection and Traffic Control Manual, which includes requirements to ensure safe maintenance of traffic flow through or around the construction work zone, and safe access of police, fire, and other rescue vehicles. In addition, the Traffic Management Plan (subject to local jurisdiction

review and approval) required by Mitigation Measure 2.15-1b would direct how traffic flow is safely maintained during project construction.

Mitigation Measure 2.15-1b: PG&E shall prepare and implement a Traffic Management Plan subject to approval by the appropriate local jurisdiction (i.e., Sonoma County or City of Sonoma) prior to construction. The plan shall:

- Include a discussion of work hours, haul routes, limits on the length of open trench, work area delineation, traffic control and flagging;
- Identify all access and parking restriction and signage requirements;
- Layout a plan for notifications and a process for communication with affected residents and businesses prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;
- Include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers would be notified of the timing, location, and duration of construction activities. All roads would remain passable to emergency service vehicles at all times;
- Include the requirement that all open trenches be covered with metal plates at the end of each workday to accommodate traffic and access; and
- Specify the street restoration requirements pursuant to PG&E's franchise agreements with the local jurisdictions.

Mitigation Measure 2.15-1c: PG&E shall identify all roadway locations where special construction techniques (e.g., horizontal boring, directional drilling or night construction) would be used to minimize impacts to traffic flow.

Mitigation Measure 2.15-1d: PG&E shall develop circulation and detour plans to minimize impact to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.

Mitigation Measure 2.15-1e: PG&E shall encourage construction crews to park at substations to limit lane closures in the public right-of-way.

Mitigation Measure 2.15-1f: PG&E shall coordinate with Caltrans, Sonoma County, City of Sonoma, and any other appropriate entity, regarding measures to minimize the cumulative effect of simultaneous construction activities in overlapping areas.

Mitigation Measure 2.15-1g: PG&E shall consult with Sonoma County Transit at least one month prior to construction to coordinate bus stop relocations (as necessary) and to reduce potential interruption of transit service.

Significance after Mitigation: Less than significant.

Mitigation Measure 2.1-1

The undergrounding of the transmission line on Leveroni Road between the eastern edge of Sonoma Creek to the Sonoma Substation, as stated in Mitigation Measure 2.1-1, would include about 1/2 mile of transmission line to be installed in the public roadway.

Undergrounding of the transmission line would generate daily construction trips from both crew workers and construction trucks and would cause delays due to construction activities in the roadway.

The trench size for open-cut installation within paved roadways would be approximately two feet wide by five feet deep with active work areas of about four feet on one side of the trench and 10 to 12 feet on the other side for access by trucks and loaders. The construction easement would allow only enough right-of-way for one-way alternate-flow traffic on Leveroni Road. It is expected that open trench construction within paved roadways would be completed in a three-month period.

It is estimated that 1,133 cubic yards of soil would be excavated along the section. It is estimated that with an average haul load of a 10 CY per truck, the project would generate a peak of 10 truck haul round trips (20 one-way trips) per work day. Accounting for the delivery of construction components (which would be shipped on demand to the project site throughout the construction period), the total number of off-site construction truck trips would be approximately 10 round trips (20 one-way trips) per work day.

The project would significantly affect roadway segments and intersections on Leveroni Road if the construction zone were to reduce the number of travel lanes during peak traffic periods. The impacts during peak traffic periods would be significant because they would result in either roadway or intersection levels of service that would be unacceptable. The decrease in traffic volumes outside the peak periods typically, but not universally, is sufficient to allow the reduced number of travel lanes to accommodate the traffic flow without significant delays. Delays also would be experienced by drivers during off-peak hours, but because of the lower volume, fewer people would be affected by the delays during those periods.

As specified under Mitigation Measure 2.15-1a, PG&E shall obtain all necessary local road encroachment permits prior to construction and would comply with all the applicable conditions of approval. In addition, Mitigation Measure 2.15-1b requires the contractor to prepare a traffic management plan in accordance with professional engineering standards prior to construction. Specific requirements that may be included in the traffic management plan are identified under Mitigation Measures 2.15-1b through 2.15-1g. Implementation of Mitigation Measures 2.15-1a through 2.15-1g would ensure

potential impacts associated with temporary increases in construction traffic and construction within the Leveroni Road right-of-way would be mitigated to a less than significant level.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks: *less than significant impact with incorporated mitigation.*

Although there are no airports within two miles of the project, helicopters would be used during the construction of the transmission line. Large helicopters (“skycranes”) would be used for the installation of some new poles. Small helicopters would be used for conductor removal and installation, as well as material, equipment and personnel transportation. A helicopter would be used for poles at the substations and to install Poles 14, 26, 33-49, 51-56, 58, 59 and 63-66.

The Federal Aviation Administration (FAA) requires a Lift Plan for use of helicopters in populated areas. The Lift Plan includes identification of helicopter staging areas and flight paths with the least potential to affect populated areas within the distances specific by FAA. At elevations where damage from downdraft can occur, FAA regulations require that a skycrane cannot fly within 150 feet laterally of an occupied structure, including homes, buildings, and roads. A loaded skycrane (i.e., one carrying equipment or material) cannot fly within 300 feet laterally of an occupied structure. Structures are required to be unoccupied if the required distances cannot be maintained during the flight.

Impact 2.15-2: Operation of the “skycrane” helicopters could result in exposure of structures or persons to risk. This would be a less than significant impact with implementation of Mitigation Measure 2.15-2.

Mitigation Measure 2.15-2: PG&E shall prepare and comply with a Lift Plan approved by the FAA prior to all “skycrane” construction helicopter operations. The need for short-term road closures, if any, shall be identified in the Lift Plan and shall be coordinated with the appropriate jurisdictions as described in Mitigation Measures 2.15-1a through 2.15-1g. The Lift Plan shall also discuss the potential to adversely affect to nearby residents.

Significance after Mitigation: Less than significant.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment): *less than significant impact with incorporated mitigation.*

The project would not change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. However, heavy equipment operating adjacent to or within a road right-of-way could increase the risk of accidents. Construction-generated trucks on project area roadways would interact with other vehicles. Potential conflicts also could occur between construction traffic and alternative modes of transportation (e.g., bicyclists and buses).

Impact 2.15-3: Project construction activities could increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. This would be a less than significant impact with implementation of Mitigation Measures 2.15-1b through 2.15-1g.

Mitigation Measure 2.15-3: Implement Mitigation Measure 2.15-1b through 2.15-1g.

Implementation of Mitigation Measure 2.15-1b requires the contractor (PG&E) to prepare a traffic management plan in accordance with professional engineering standards prior to construction, including compliance with roadside safety protocols, so as to reduce the risk of accidents. Specific requirements that may be included in the traffic management plan are identified under Mitigation Measures 2.15-1b through 2.15-1g. Thus, implementation of Mitigation Measures 2.15-1b through 2.15-1g would ensure temporary increases in the potential for accidents would be mitigated to a less than significant level.

Significance after Mitigation: Less than significant.

e) **Result in inadequate emergency access: *less than significant impact with incorporated mitigation.***

The Proposed Project would have temporary effects on traffic flow, particularly with routes within road rights of way. Transmission line pole installation within or across streets and temporary reduction in travel lanes could result in delays for emergency vehicle access in the vicinity of the work site.

Impact 2.15-4: Project construction activities could result in delays for emergency vehicles on project area roadways. This would be a less than significant impact with implementation of Mitigation Measure 2.15-1b.

Mitigation Measure 2.15-4: Implement Mitigation Measure 2.15-1b.

Implementation of Mitigation Measure 2.15-1b would require the construction contractor to establish methods for maintaining traffic flow in and along the project corridor and minimizing disruption to emergency vehicle access to land uses along the alignment, especially along Frates, Adobe, and Leveroni Roads, which are major thoroughfares. Specific requirements that may be included in the traffic management plan are identified under Mitigation Measure 2.15-1b. Implementation of Mitigation Measure 2.15-1b would

ensure potential impacts associated with temporary effects on emergency access would be mitigated to a less than significant level.

Significance after Mitigation: Less than significant.

f) Result in inadequate parking capacity: *less than significant impact with incorporated mitigation.*

The Proposed Project would create limited new, temporary parking demand for construction workers and construction vehicles as the crew moves along the installation alignment. The project would not generate a substantial number of construction workers along the alignment at any one location; therefore, the number of parking spaces required would not be substantial. Parking is not allowed on roadways in the project corridor; therefore, construction along the alignment would not displace on-street parking. Although some construction workers would park at a substation or staging area, some would park near that day's construction site and would require additional construction zone to accommodate parking needs. Nonetheless, given the proposed rate of transmission line installation, impacts would be relatively brief at any one location along the alignment. Construction workers for the upgrades at the Lakeville and Sonoma Substation would park on-site.

Impact 2.15-5: Project construction activities could generate a demand for on-street parking spaces to accommodate construction worker vehicles on project area roadways. This would be a less than significant impact with implementation of Mitigation Measure 2.15-1e.

Mitigation Measure 2.15-5: Implement Mitigation Measure 2.15-1e.

Implementation of Mitigation Measure 2.15-1e would require the construction contractor to encourage construction crews to park at substations to limit lane closures in the public right-of-way, thus minimizing construction effects from on-street parking on area roadways. Implementation of Mitigation Measure 2.15-1e would ensure potential impacts associated with the temporary loss of roadway width because of parking in the roadway right-of-way would be mitigated to a less than significant level.

Significance after Mitigation: Less than significant.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks): *less than significant impact with incorporated mitigation.*

The Proposed Project would have no long-term impact on demand for alternative transportation or on alternative transportation facilities. However, transmission line installation could disrupt access to bus stops and slow bus movements for Route 40 operated by Sonoma County Transit. Route 40, which provides service between the

Petaluma Depot and Sonoma Plaza, operates on Frates Road, Adobe Road, Leveroni Road and Fifth Street West.

Impact 2.15-6: Project construction activities could cause disruptions to transit service on project area roadways. This would be a less than significant impact with implementation of Mitigation Measure 2.15-1g.

Mitigation Measure 2.15-6: Implement Mitigation Measure 2.15-1g.

Implementation of Mitigation Measure 2.15-1g would require the construction contractor to establish methods for minimizing construction effects on transit service. Specific requirements that may be included in the traffic management plan are identified under Mitigation Measure 2.15-1g. Implementation of Mitigation Measure 2.15-1g would ensure potential impacts associated with temporary disruptions to transit service would be mitigated to a less than significant level.

Significance after Mitigation: Less than significant.

References – Transportation and Traffic

- California Department of Motor Vehicles (DMV), 2005, Communications and Programs Division *California Vehicle Code*, January 2005.
- California Department of Transportation (Caltrans), 2004. *Construction Manual*, last revised December 2004.
- California Department of Transportation (Caltrans), Traffic and Vehicle Data Systems Unit, Traffic Operations Division, 2003. *Traffic Volumes*, 2003.
- California Joint Utility Traffic Control Committee (CJUTCC), 1996. *Work Area Protection and Traffic Control Manual*, April 1996.
- City of Sonoma Community Development Department, 1995. *City of Sonoma 1995–2005 General Plan*, adopted August 30, 1995.
- City of Sonoma, 2002. *Sonoma Municipal Code*, 2002.
- Federal Highway Administration (FHA), 2003. *Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*, U.S. Department of Transportation, Office of Highway Safety, November 2003.
- Sonoma County Transportation Authority (SCTA) 2004. *Comprehensive Transportation Plan*, 2004.
- SCTA, 2001. *Countywide Transportation Plan of Sonoma County*. 2003.
- Sonoma County Permit and Resource Management Department (Sonoma County PRMD), 1989. *Sonoma County General Plan*, adopted March 23, 1989.